

CLAIMS

This listing of Claims will replace all prior versions, and listings, of claims in the application:

1-2. (Canceled.)

3. (Original) A system for automatically downloading radio or protocol personalities over defined channels to a mobile terminal in a wide area network, the system comprising:

an adaptable terminal, a spatial location service for providing geographic location information to said terminal, at least one component repository, and a download server,

the component repository including at least one downloadable component and further including a service template that defines the service attributes of said downloadable component,

said adaptable terminal including a location module in communication with the spatial location service to define the geographic location of the mobile terminal,

the terminal further including a User Agent for locating downloadable components in the defined geographic location using a service request that enumerates the service needs of mode attributes,

the server directory including a listing of service templates of component repositories in a defined geographic location and a Service Agent for communicating with said component depositories and User Agents,

wherein said User Agent queries said Service Agent in the defined geographic location and neighboring locations to locate service components that match the terminals service need

attributes such that when a matching component is located said terminal automatically downloads said component to said terminal.

4-5. (Canceled.)

6. (Previously Presented) The system of Claim 3, wherein the service template is machine and human understandable.

7. (Previously Presented) The system of Claim 3, wherein the service template further comprises rules for service advertisement attributes.

8. (Previously Presented) The system of Claim 3, wherein the service template further comprises a scope list.

9. (Previously Presented) The system of Claim 3, wherein the service template further comprises a predicate string.

10. (Previously Presented) The system of Claim 3, wherein the service template further comprises a Service Location Protocol string.

11. (Previously Presented) The system of Claim 3, wherein the service request further comprises a template.

12. (New) A method for downloading a component from a communication network to a mobile terminal, comprising the steps of:

determining at a location server of the communication network a projected geographic area where the mobile terminal will be at a future time;

identifying at a user agent of the communication network a protocol mode component and service attributes of the protocol mode component that is supported in the projected geographic area;

determining at the mobile terminal whether the protocol mode component and compatible service attributes match service needs of the mobile terminal;

sending a request for the protocol mode component from the mobile terminal to the network, if the protocol mode component matches the service needs of the mobile terminal;

requesting a directory agent to identify a service agent in the communication network that can communicate with a component repository, wherein the directory agent includes a listing of service agents and wherein the component repository includes the protocol mode component;

receiving the protocol mode component at the service agent from the component repository;

receiving the protocol mode component at the user agent from the service agent;

sending the protocol mode component from the user agent to the mobile terminal; and,

downloading the protocol mode component at the mobile terminal before the mobile terminal enters the projected geographic area.

13. (New) The method of Claim 12, further comprising creating a service template, and populating the service template with at least one of projected geographic area information, information identifying the protocol mode component and the compatible service attributes, and information identifying the service needs of the mobile terminal.

14. (New) The method of Claim 13, wherein the populating step further comprises populating the service template at at least one of the location server, the user agent, and the mobile terminal.

15. (New) The method of Claim 14, wherein the populating step further comprises populating the service template with the projected geographic area information at the location server, populating the service template with the information identifying the protocol mode component and compatible service attributes at the user agent, and populating the service template with the information identifying the service needs at the mobile terminal.

16. (New) The method of Claim 12, wherein the request further includes a service template.

17. (New) A system for downloading components from a communication network to a mobile terminal, comprising:

a mobile terminal including a location module,

a location server in communication with the location module and configured to determine where a projected geographic area of the mobile terminal will be at a future time;

a user agent that is configured to identify a protocol mode component and service attributes compatible with the protocol mode component that is supported in the projected geographic area;

a component repository including the protocol mode component;

service agents, wherein at least one of the service agents is in communication with the component repository; and,

a directory agent including a listing of the service agents, wherein the mobile terminal is configured to send a service request to the user agent for the protocol mode component, if the protocol mode component matches service needs of the terminal; wherein the user agent is in communication with the at least one service agent and the directory agent, the user agent being configured to receive the protocol mode component from the at least one service agent, and the user agent being configured to send the protocol mode component to the mobile terminal, wherein the mobile terminal is configured to download the protocol mode component.

18. The system of Claim 17, wherein at least one of the location server, the user agent, and the mobile terminal is configured to create a service template.

19. The system of Claim 18, wherein at least one of the location server, the user agent, and the mobile terminal is configured to populate the service template.

20. The system of Claim 18, wherein the service template is configured to store at least one of projected geographic area information, information identifying the protocol mode component and the compatible service attributes, and information identifying the service needs of the mobile terminal.

21. The system of Claim 17, wherein the communication network further comprises a base station, the base station including the location server and the user agent.

22. The system of Claim 17, wherein the user agent is configured to contact the directory agent to determine which of the service agents includes the protocol mode component.